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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,142	06/19/2003	Steven McCanne	019599-000120US	6248

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EXAMINER

DONAGHUE, LARRY D

ART UNIT

PAPER NUMBER

2154

DATE MAILED: 11/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/600,142	Applicant(s) MCCANNE, STEVEN	
	Examiner Larry D. Donaghue	Art Unit 2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 10-23 is/are pending in the application.
- 4a) Of the above claim(s) 16-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 10-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>06/19/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

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1. Claims 1 and 10-15 are presented for examination.
2. Claims 16-23 have been withdrawn from further consideration.
3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Torch "The X-Bone" and Thomas (IP Multicast in RealSystem G2)

5. As to claim 1, Touch (pages 1-3) taught the invention substantially as claimed by describing a per-overlay routing daemon (overlay routing processor) that associates computers with the M-Bone (a given overlay group), associates whether received information is associated with the given overlay group, and routes the received information to the computers associated with the M-Bone by selecting an IP-tunnel operating over the existing network infrastructure (native routing protocol). Touch did not expressly teach the using of unicasting.

The previously cited reference did not expressly teach instructions for determining, for each computer associated with the overlay group whether the computer is to be transferred the information using multicasts or unicasting based on a request from the computer indicating a transport preference; instructions for routing the received information to the computers having requested a multicast connection using the native routing protocol to provide the information by multicasting, and instructions for routing the received information to the computers having requested a unicast connection using the native routing protocol to provide the information by unicasting. This is taught by Thomas (page 2, section titled Back-Channel Multicast). It would have been obvious to one of ordinary skill in the art to use unicasting to allow Unicast clients can connect directly to overlay routers via unicast so that regions of the network that do not provide native multicast support can be reached, as expressly suggested by Thomas.

6. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Touch and Thomas in view of Amir et al. , "An Application Level Video Gateway".

7. Regarding claims 12-13, Touch teaches the invention substantially as claimed.

See the rejection of claim 1 above. Touch does not teach the additional limitations of claims 12-13. Amir on the other hand teaches that MBONE traffic includes a TTL number in each packet (p. 3). A TTL instruction limits the number of

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transfers on computers for a given portion (i.e., multicast packet) of information. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Amir regarding the TTL field in the MBONE packets with Touch because they both describe different aspects of the same thing - the MBONE.

8. Claims 1, 10 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hodel, H. "Policy Tree Multicast Routing: An Extension to Sparse Mode Source Tree Delivery", and Thomas (IP Multicast in RealSystem G2).

As to claim 1, Hodel taught the invention substantially as claimed, by describing, particularly at page 84, a multicast border router that associates computers on the network with a given overlay group (p. 84 routers in interdomain multicast delivery tree), determines whether received information is associated with a given overlay group (p. 84 plural multicast sessions on interdomain network), and routes the received information to the computers associated with the given overlay group by using the native routing protocol (p. 84 column 2 - native forwarding). Hodel did not expressly teach the using of unicasting.

The previously cited reference did not expressly teach instructions for determining, for each computer associated with the overlay group whether the computer is to be transferred the information using multicasts or unicasting based on a request from the computer indicating a transport preference; instructions for routing the received information to the computers having requested a multicast connection using the native routing protocol to provide the information by multicasting, and instructions for routing the received information to the computers having requested a unicast connection using the native routing protocol to provide the information by unicasting. This is taught by Thomas (page 2, section titled Back-Channel Multicast). It would have been obvious to one of ordinary skill in the art to use unicasting to allow Unicast clients can connect directly to overlay routers via unicast so that regions of the network that do not provide native multicast support can be reached, as expressly suggested by Thomas.

As to claim 10, Hodel teaches a system further comprising instructions for handling administrative scooping (p. 84 col. 1 par. 1 ISP control over native multicast).

As to claim 14, Hodel teaches a system further comprising instructions for preventing the transfer of information between predetermined computers (p. 85 prune message processing).

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As to claim 15, Hodel teaches a system wherein one or more computers are identified by an address, the overlay routing processor further comprising using the address to prevent the transfer of information between the computers (p. 85 prune message processing).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hodel and Thomas in view of Decasper, D., "Router Plugins: A Software Architecture for Next Generation Routers"

Regarding claim 11, Hodel teaches the invention substantially as claimed.

See the rejection of claim 1 above. Hodel and Applicant's admission not teach the additional limitation of claim

Decasper on the other hand teaches a system of router plugins (p. 229). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Decasper's router plugin module with the MBR of Hodel because of Decasper's explicit teaching that plugins allow dynamic upgrades, which is seen as an increasingly important (p. 229 abstract). A system including router plugin modules would implicitly include instructions for servicing those modules.

9. Applicant's arguments with respect to claims 1 and 10-15 have been considered but are moot in view of the new ground(s) of rejection.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lioy et al. 6,483,822

Armitage et al. 6,374,303

Nguyen et al. 6,006,267

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

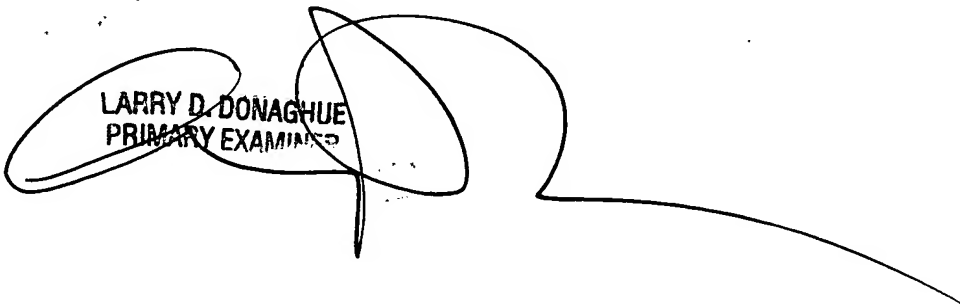
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larry D Donaghue whose telephone number is 571-272-3962. The examiner can normally be reached on M-F 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LARRY D. DONAGHUE
PRIMARY EXAMINER